

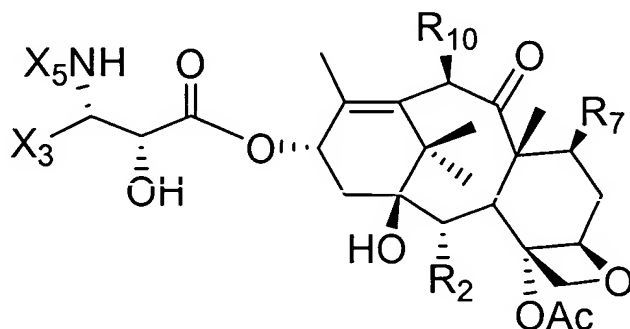
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AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in this application.

Listing of Claims:

1. **(original)** A method of inhibiting tumor growth in a mammal, said method comprising administering a therapeutically effective amount of a composition comprising at least one pharmaceutically acceptable carrier and a taxane having the formula



wherein

X₃ is 2-thienyl, 3-thienyl, 2-furyl, 3-furyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, isobutenyl, isopropyl, cyclopropyl, cyclobutyl or cyclopentyl;

X₅ is -COX₁₀ and X₁₀ is isobutenyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, butenyl, isobutyl or n-propyl or X₅ is -COOX₁₀ and X₁₀ is ethyl, n-propyl, isopropyl, or isobutyl;

R₂ is benzoyloxy;

R₇ is R_{7a}OCOO-;

R₁₀ is hydroxy; and

R_{7a} is methyl or ethyl.

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2. **(original)** The method of claim 1 wherein X_3 is 2-thienyl, 3-thienyl, 2-furyl, 3-furyl, isobutenyl or cyclopropyl and X_5 is $-COX_{10}$ and X_{10} is isobutenyl, 2-furyl or 2-thienyl or X_5 is $-COOX_{10}$ and X_{10} is isopropyl or isobutyl.

3. **(original)** The method of claim 1 wherein X_3 is thienyl.

4. **(original)** The method of claim 1 wherein X_3 is 2-thienyl.

5. **(original)** The method of claim 1 wherein X_3 is furyl.

6. **(original)** The method of claim 1 wherein X_3 is 2-furyl.

7. **(original)** The method of claim 1 wherein R_{7a} is methyl.

8. **(original)** The method of claim 1 wherein R_{7a} is ethyl.

9. **(original)** The method of claim 1 wherein X_5 is $-COOX_{10}$ and X_{10} is isopropyl.

10. **(original)** The method of claim 7 wherein X_3 is thienyl.

11. **(original)** The method of claim 7 wherein X_3 is 2-thienyl.

12. **(original)** The method of claim 7 wherein X_3 is furyl.

13. **(original)** The method of claim 7 wherein X_3 is 2-furyl.

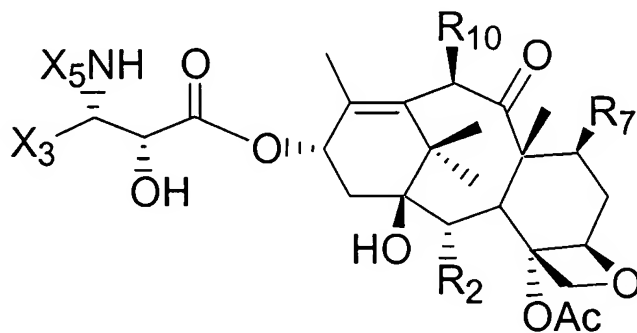
14. **(original)** The method of claim 8 wherein X_3 is thienyl.

15. **(original)** The method of claim 8 wherein X_3 is 2-thienyl.

16. **(original)** The method of claim 8 wherein X_3 is furyl.

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17. **(original)** The method of claim 8 wherein X_3 is 2-furyl.
18. **(original)** The method of claim 9 wherein X_3 is thienyl.
19. **(original)** The method of claim 9 wherein X_3 is 2-thienyl.
20. **(original)** The method of claim 9 wherein X_3 is furyl.
21. **(original)** The method of claim 9 wherein X_3 is 2-furyl.
22. **(original)** A method of inhibiting tumor growth in a mammal, said method comprising administering a therapeutically effective amount of a composition comprising at least one pharmaceutically acceptable carrier and a taxane having the formula

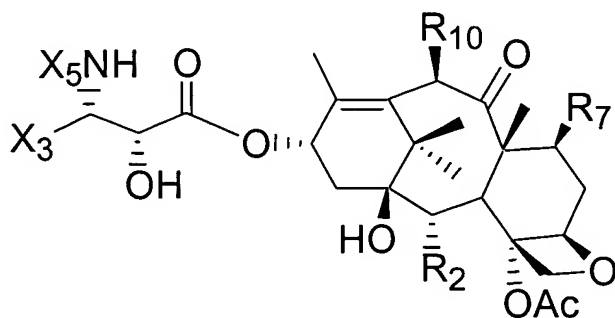


wherein

- X_3 is 2-furyl, 3-furyl, 2-thienyl or 3-thienyl;
- X_5 is $-\text{COX}_{10}$ and X_{10} is trans-propenyl;
- R_2 is benzoyloxy;
- R_7 is $R_{7a}\text{OCOO}-$;
- R_{10} is hydroxy; and
- R_{7a} is methyl or ethyl.

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23. **(original)** The method of claim 22 wherein R_{7a} is methyl.
24. **(original)** The method of claim 22 wherein R_{7a} is ethyl.
25. **(original)** The method of claim 23 wherein X_3 is thienyl.
26. **(original)** The method of claim 23 wherein X_3 is 2-thienyl.
27. **(original)** The method of claim 23 wherein X_3 is furyl.
28. **(original)** The method of claim 23 wherein X_3 is 2-furyl.
29. **(original)** The method of claim 24 wherein X_3 is thienyl.
30. **(original)** The method of claim 24 wherein X_3 is 2-thienyl.
31. **(original)** The method of claim 24 wherein X_3 is furyl.
32. **(original)** The method of claim 24 wherein X_3 is 2-furyl.
33. **(original)** A method of inhibiting tumor growth in a mammal, said method comprising administering a therapeutically effective amount of a composition comprising at least one pharmaceutically acceptable carrier and a taxane having the formula



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wherein

X_3 is 2-furyl;

X_5 is $-\text{COX}_{10}$ and X_{10} is isobutenyl or X_5 is $-\text{COOX}_{10}$ and X_{10} is t-butyl or t-amyl;

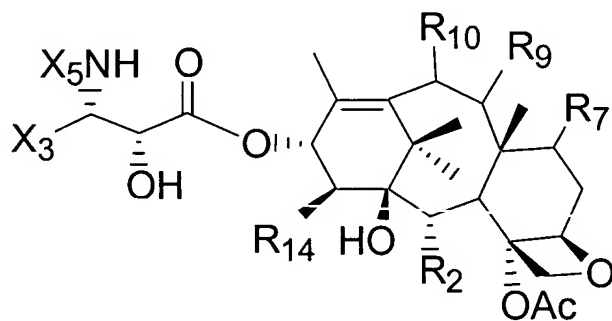
R_2 is benzoyloxy;

R_7 is $R_{7a}\text{OCOO}-$;

R_{10} is hydroxy; and

R_{7a} is benzyl.

34. **(original)** A method for preparing a pharmaceutical composition comprising mixing at least one nonaqueous, pharmaceutically acceptable solvent and a taxane having the formula



wherein

R_2 is acyloxy;

R_7 is carbonate;

R_9 is keto, hydroxy, or acyloxy;

R_{10} is hydroxy;

R_{14} is hydrido or hydroxy;

X_3 is substituted or unsubstituted alkyl, alkenyl, alkynyl or heterocyclo;

X_5 is $-\text{COX}_{10}$, $-\text{COOX}_{10}$, or $-\text{CONHX}_{10}$;

X_{10} is hydrocarbyl, substituted hydrocarbyl, or heterocyclo; and

Ac is acetyl.

Claims 35-45 **(cancelled)**.

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46. **(new)** The method of claim 34 wherein X_3 is 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.

47. **(new)** The method of claim 34 wherein R_7 is $R_{7a}OCOO^-$ and R_{7a} is methyl or ethyl.

48. **(new)** The method of claim 34 wherein X_5 is $-COX_{10}$ and X_{10} is substituted or unsubstituted phenyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl, or X_5 is $-COOX_{10}$ and X_{10} is substituted or unsubstituted $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.

49. **(new)** The method of claim 34 wherein X_3 is 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl, R_7 is $R_{7a}OCOO^-$ and R_{7a} is methyl or ethyl.

50. **(new)** The method of claim 34 wherein X_3 is 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl, X_5 is $-COX_{10}$ and X_{10} is substituted or unsubstituted phenyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl, or X_5 is $-COOX_{10}$ and X_{10} is substituted or unsubstituted $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.

51. **(new)** The method of claim 34 wherein R_7 is $R_{7a}OCOO^-$ and R_{7a} is methyl or ethyl, X_5 is $-COX_{10}$ and X_{10} is substituted or unsubstituted phenyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl, or X_5 is $-COOX_{10}$ and X_{10} is substituted or unsubstituted $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl.

52. **(new)** The method of claim 34 wherein X_3 is 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, $C_1 - C_8$ alkyl, $C_2 - C_8$ alkenyl, or $C_2 - C_8$ alkynyl, R_7 is $R_{7a}OCOO^-$, R_{7a} is methyl or ethyl, X_5 is $-COX_{10}$ and X_{10} is substituted or unsubstituted

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phenyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, C₁ - C₈ alkyl, C₂ - C₈ alkenyl, or C₂ - C₈ alkynyl, or X₅ is -COOX₁₀ and X₁₀ is substituted or unsubstituted C₁ - C₈ alkyl, C₂ - C₈ alkenyl, or C₂ - C₈ alkynyl.

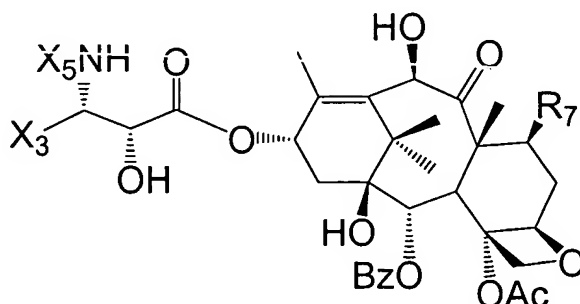
53. **(new)** The method of claim 34 wherein X₃ is thienyl.

54. **(new)** The method of claim 34 wherein X₃ is 2-thienyl.

55. **(new)** The method of claim 34 wherein X₃ is furyl.

56. **(new)** The method of claim 34 wherein X₃ is 2-furyl.

57. **(new)** A taxane having the formula



wherein R₂, R₇, X₅, X₁₀ and X₃, in combination, selected from one of combinations 1-45 appearing in the following table:

Combination No.	R ₇	R _{7a}	X ₅	X ₁₀	X ₃
1	R _{7a} OCOO-	methyl	-COOX ₁₀	isopropyl	2-thienyl
2	R _{7a} OCOO-	ethyl	-COOX ₁₀	isobutyl	2-thienyl
3	R _{7a} OCOO-	methyl	-COOX ₁₀	t-butyl	2-thienyl
4	R _{7a} OCOO-	ethyl	-COOX ₁₀	t-butyl	2-thienyl
5	R _{7a} OCOO-	methyl	-COOX ₁₀	t-butyl	3-thienyl

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Combination No.	R ₇	R _{7a}	X ₅	X ₁₀	X ₃
6	R _{7a} OCOO-	ethyl	-COOX ₁₀	t-butyl	3-thienyl
7	R _{7a} OCOO-	methyl	-COOX ₁₀	isobutyl	3-thienyl
8	R _{7a} OCOO-	ethyl	-COOX ₁₀	isobutyl	3-thienyl
9	R _{7a} OCOO-	methyl	-COOX ₁₀	t-butyl	2-furyl
10	R _{7a} OCOO-	ethyl	-COOX ₁₀	t-butyl	2-furyl
11	R _{7a} OCOO-	methyl	-COOX ₁₀	isobutyl	2-furyl
12	R _{7a} OCOO-	ethyl	-COOX ₁₀	isobutyl	2-furyl
13	R _{7a} OCOO-	benzyl	-COOX ₁₀	t-butyl	2-furyl
14	R _{7a} OCOO-	benzyl	-COOX ₁₀	t-amyl	2-furyl
15	R _{7a} OCOO-	methyl	-COOX ₁₀	t-butyl	3-furyl
16	R _{7a} OCOO-	ethyl	-COOX ₁₀	t-butyl	3-furyl
17	R _{7a} OCOO-	methyl	-COOX ₁₀	isobutyl	3-furyl
18	R _{7a} OCOO-	ethyl	-COOX ₁₀	isobutyl	3-furyl
19	R _{7a} OCOO-	methyl	-COOX ₁₀	t-butyl	isobutenyl
20	R _{7a} OCOO-	ethyl	-COOX ₁₀	t-butyl	isobutenyl
21	R _{7a} OCOO-	methyl	-COOX ₁₀	isobutyl	isobutenyl
22	R _{7a} OCOO-	ethyl	-COOX ₁₀	isobutyl	isobutenyl
23	R _{7a} OCOO-	methyl	-COOX ₁₀	t-butyl	cyclopropyl
24	R _{7a} OCOO-	ethyl	-COOX ₁₀	t-butyl	cyclopropyl
25	R _{7a} OCOO-	methyl	-COOX ₁₀	isobutyl	cyclopropyl
26	R _{7a} OCOO-	ethyl	-COOX ₁₀	isobutyl	cyclopropyl
27	R _{7a} OCOO-	methyl	-COX ₁₀	2-furyl	2-thienyl
28	R _{7a} OCOO-	ethyl	-COX ₁₀	2-furyl	2-thienyl
29	R _{7a} OCOO-	methyl	-COX ₁₀	2-thienyl	2-thienyl
30	R _{7a} OCOO-	ethyl	-COX ₁₀	2-thienyl	2-thienyl
31	R _{7a} OCOO-	methyl	-COX ₁₀	trans-propenyl	3-thienyl
32	R _{7a} OCOO-	ethyl	-COX ₁₀	trans-propenyl	3-thienyl

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Combination No.	R ₇	R _{7a}	X ₅	X ₁₀	X ₃
33	R _{7a} OCOO-	methyl	-COX ₁₀	trans-propenyl	2-furyl
34	R _{7a} OCOO-	ethyl	-COX ₁₀	trans-propenyl	2-furyl
35	R _{7a} OCOO-	methyl	-COX ₁₀	phenyl	2-thienyl
36	R _{7a} OCOO-	ethyl	-COX ₁₀	phenyl	2-thienyl
37	R _{7a} OCOO-	methyl	-COX ₁₀	trans-propenyl	2-thienyl
38	R _{7a} OCOO-	ethyl	-COX ₁₀	trans-propenyl	2-thienyl
39	R _{7a} OCOO-	methyl	-COX ₁₀	isobutenyl	2-thienyl
40	R _{7a} OCOO-	ethyl	-COX ₁₀	isobutenyl	2-thienyl
41	R _{7a} OCOO-	methyl	-COX ₁₀	trans-propenyl	3-furyl
42	R _{7a} OCOO-	ethyl	-COX ₁₀	trans-propenyl	3-furyl
43	R _{7a} OCOO-	benzyl	-COX ₁₀	trans-propenyl	2-thienyl
44	R _{7a} OCOO-	ethyl	-COX ₁₀	isobutenyl	2-furyl
45	R _{7a} OCOO-	benzyl	-COX ₁₀	isobutenyl	2-furyl

58. **(new)** The taxane of claim 57 wherein R₂ is benzoyloxy; R₇ is R_{7a}OCOO-; X₅ is -COOX₁₀; X₁₀ is isopropyl or isobutyl; X₃ is 2-thienyl; and R_{7a} is methyl or ethyl.

59. **(new)** The taxane of claim 57 wherein R₂ is benzoyloxy; R₇ is R_{7a}OCOO-; X₅ is -COOX₁₀; X₁₀ is t-butyl; X₃ is 2-thienyl, and R_{7a} is methyl or ethyl.

60. **(new)** The taxane of claim 57 wherein R₂ is benzoyloxy; R₇ is R_{7a}OCOO-; X₅ is -COOX₁₀; X₁₀ is t-butyl; X₃ is 3-thienyl, and R_{7a} is methyl or ethyl.

61. **(new)** The taxane of claim 57 wherein R₂ is benzoyloxy; R₇ is R_{7a}OCOO-; X₅ is -COOX₁₀; X₁₀ is isobutyl; X₃ is 3-thienyl, and R_{7a} is methyl or ethyl.

62. **(new)** The taxane of claim 57 wherein R₂ is benzoyloxy; R₇ is R_{7a}OCOO-; X₅ is -COOX₁₀; X₁₀ is t-butyl; X₃ is 2-furyl; and R_{7a} is methyl or ethyl.

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63. **(new)** The taxane of claim 57 wherein R_2 is benzoyloxy; R_7 is $R_{7a}OCOO^-$; X_5 is $-COOX_{10}$; X_{10} is isobutyl; X_3 is 2-furyl; and R_{7a} is methyl or ethyl.

64. **(new)** The taxane of claim 57 wherein R_2 is benzoyloxy; R_7 is $R_{7a}OCOO^-$; X_5 is $-COOX_{10}$; X_{10} is t-butyl or tert-amyl; X_3 is 2-furyl; and R_{7a} is benzyl.

65. **(new)** The taxane of claim 57 wherein R_2 is benzoyloxy; R_7 is $R_{7a}OCOO^-$; X_5 is $-COOX_{10}$; X_{10} is t-butyl; X_3 is 3-furyl; and R_{7a} is methyl or ethyl.

66. **(new)** The taxane of claim 57 wherein R_2 is benzoyloxy; R_7 is $R_{7a}OCOO^-$; X_5 is $-COOX_{10}$; X_{10} is isobutyl; X_3 is 3-furyl; and R_{7a} is methyl or ethyl.

67. **(new)** The taxane of claim 57 wherein R_2 is benzoyloxy; R_7 is $R_{7a}OCOO^-$; X_5 is $-COOX_{10}$; X_{10} is t-butyl; X_3 is isobutenyl; and R_{7a} is methyl or ethyl.

68. **(new)** The taxane of claim 57 wherein R_2 is benzoyloxy; R_7 is $R_{7a}OCOO^-$; X_5 is $-COOX_{10}$; X_{10} is isobutyl; X_3 is isobutenyl; and R_{7a} is methyl or ethyl.

69. **(new)** The taxane of claim 57 wherein R_2 is benzoyloxy; R_7 is $R_{7a}OCOO^-$; X_5 is $-COOX_{10}$; X_{10} is t-butyl; X_3 is cyclopropyl; and R_{7a} is methyl or ethyl.

70. **(new)** The taxane of claim 57 wherein R_2 is benzoyloxy; R_7 is $R_{7a}OCOO^-$; X_5 is $-COOX_{10}$; X_{10} is isobutyl; X_3 is cyclopropyl; and R_{7a} is methyl or ethyl.

71. **(new)** The taxane of claim 57 wherein R_2 is benzoyloxy; R_7 is $R_{7a}OCOO^-$; X_5 is $-COX_{10}$; X_{10} is 2-furyl or 2-thienyl; X_3 is 2-thienyl; and R_{7a} is methyl or ethyl.

72. **(new)** The taxane of claim 57 wherein R_2 is benzoyloxy; R_7 is $R_{7a}OCOO^-$; X_5 is $-COX_{10}$; X_{10} is trans-propenyl; X_3 is 3-thienyl; and R_{7a} is methyl or ethyl.

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73. **(new)** The taxane of claim 57 wherein R_2 is benzoyloxy; R_7 is $R_{7a}OCO-$; X_5 is $-COX_{10}$; X_{10} is trans-propenyl; X_3 is 2-furyl; and R_{7a} is methyl or ethyl.

74. **(new)** The taxane of claim 57 wherein R_2 is benzoyloxy; R_7 is $R_{7a}OCO-$; X_5 is $-COX_{10}$; X_{10} is phenyl, trans-propenyl, or isobutenyl; X_3 is 2-thienyl; and R_{7a} is methyl or ethyl.

75. **(new)** The taxane of claim 57 wherein R_2 is benzoyloxy; R_7 is $R_{7a}OCO-$; X_5 is $-COX_{10}$; X_{10} is trans-propenyl; X_3 is 3-furyl; and R_{7a} is methyl or ethyl.

76. **(new)** The taxane of claim 57 wherein R_2 is benzoyloxy; R_7 is $R_{7a}OCO-$; X_5 is $-COX_{10}$; X_{10} is trans-propenyl; X_3 is 2-thienyl; and R_{7a} is benzyl.

77. **(new)** The taxane of claim 57 wherein R_2 is benzoyloxy; R_7 is $R_{7a}OCO-$; X_5 is $-COX_{10}$; X_{10} is isobutenyl; X_3 is 2-furyl; and R_{7a} is ethyl or benzyl.